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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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08/787,271 01/24/97 CISAR

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EXAMINER

IM51/0407

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PART UNIT: J

PAPER NUMBER

1741

DATE MAILED:

04/07/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☐ Responsive to communication(s) filed on _____☐ This action is FINAL.☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire THREE month(s), or ~~thirty days~~, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-29 is/are pending in the application.
Of the above, claim(s) 27-29 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-26 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

-SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Art Unit: 1741

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-26, drawn to a separator, classified in class 429, subclass 144.
 - II. Claims 27-29, drawn to a bipolar plate, classified in class 429, subclass 210.
2. The inventions are distinct, each from the other because: the bipolar plate of Group II comprises a cooling fluid field, which field is not part of the Group I separator.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and recognized divergent subject matter, restriction for examination purposes is deemed proper.
4. During a telephone conversation with Jeffery Streets on February 10, 1998 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 27-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
5. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In all of the above claims, applicant has claimed a "separator". In the battery art, the term "separator" usually refers to the non-conducting element between the anode and the cathode separating the same so that the battery will not short out.

Art Unit: 1741

Applicant's invention is directed to a --bipolar plate--. This is a conducting plate that separates adjacent cells but still functions to conduct electrons across the plate from one cell to another-see page 2, lines 7-8; page 2, lines 10-24 and page 3, lines 1-18. Reference is also made to page 5, lines 3 through page 6, line 16 and Figures 3 through 20. Therefore all of claims 1-26 should be directed to a --bipolar plate--.

In claim 16, line 4, there is no antecedent basis for "side of the porous sheet".

The term "cooling fluid channel" in claim 17 finds no antecedent basis. Ditto for claim 18, line 1.

In claim 19, line 1, there is no antecedent basis for "cooling fluid channels".

Line 5 of claim 20, with what element(s) is the electrically conducting gas barrier disposed with?

There is no antecedent basis for "electrically conducting gas barrier" of claim 21.

The term "metal sheet" of claim 22 finds no antecedent basis.

In claim 23, line 2, is the "porous electrically conducting sheet" the same as the "electrically conducting member"?

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1741

7. Claims 7, 8, 14 and 15, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Rao et al.

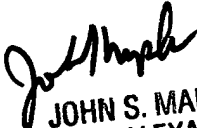
See the Abstract of Rao et al. along with column 6, lines 43-61.

8. Claim 20, as best understood, is rejected under 35 U.S.C. 102(a) as being anticipated by Schleicher et al.

See column 12, lines 38-67 and column 16, lines 32-47 and Figure 4 in the patent to Schleicher et al.

9. Any inquiry concerning this communication should be directed to John S. Maples at telephone number (703) 308-1795.

JSM/3-30-98


JOHN S. MAPLES
PRIMARY EXAMINER
GROUP 1741